

IN THE CLAIMS:

Claims 1-6, 12 and 14-18 are amended as follows:

1. A method for reducing line edge roughness of patterned photoresist, comprising:

providing a patterned photoresist, said patterned photoresist (at least )having at least a trench; and

filling said trenches, said trenches being totally filled by an additional material being effective attached to said patterned photoresist.

2. The method of claim 1, said trenches are located on sidewall of said patterned photoresist.

3. The method of claim 1, said trenches are located on this top of said patterned photoresist.

4. The method of claim 1, said additional material being adhered to said patterned photoresist.

5. The method of claim 1, said additional material being adhered to said patterned photoresist by a chemical reaction.

6. The method of claim 1, said additional material being adhered to said patterned photoresist by a physical reaction.

12. The method of claim 1, said additional material could be reacted with a hydroxyl group or proton of said patterned photoresist.

14. A method for reducing line edge roughness of patterned photoresist, comprising:

providing a patterned photoresist which (at least )having at least a trench;

filling said trenches so let that said trenches are totally filled by an additional material being effective attached to said patterned photoresist; and

treating said additional material so let that adhesion between said additional material and said patterned photoresist is enhanced after said additional material is treated.

15. The method of claim 14, said trenches being located on sidewall of said patterned photoresist.

16. The method of claim 14, said trenches being located on top of said patterned photoresist.

17. The method of claim 6, wherein available method for treating said additional material is chosen from the group consisting of thermal treatment, ultraviolet light curing, electrons beam curing, treatment of chemical reaction, and chemical reaction between a plurality of functional groups of said patterned photoresist and a plurality of functional groups of said additional materials.

18. A method for reducing line edge roughness of patterned photoresist, comprising:

providing a patterned photoresist, said patterned photoresist (at least )having at least a trench and being located on a substrate;

filling said trenches, said trenches being totally filled by an additional material being effective attached to said patterned photoresist; and